(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 30 October 2003 (30.10.2003)

PCT

(10) International Publication Number WO 03/090333 A3

- (51) International Patent Classification⁷: H02M 3/335, G09G 1/04, H01J 29/70
- (21) International Application Number: PCT/US03/11564
- (22) International Filing Date: 16 April 2003 (16.04.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/374,281 19 April 2002 (19.04.2002) US
- (71) Applicant (for all designated States except US): THOM-SON LICENSING S.A. [FR/FR]; 46, Quai A. Le Gallo, F-92648 Boulogne (FR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): CHOKSI, Snehal [IN/US]; 7539 Mill Run Road, Fort Wayne, IN 46819 (US). GRIES, Robert, Joseph [US/US]; 6143 Irwin Court, Indianapolis, IN 46237 (US). WILLIAMS, Kevin, Michael [US/US]; 6101 N. Primrose Avenue, Indianapolis, IN 46220 (US). JACKSON, David, Ross [US/US]; 4422 Abby Creek Lane, Indianapolis, IN 46205 (US). WATSON, Robert, Goah, III [US/US]; 18561 Wychwood Place, Noblesville, IN 46060 (US).

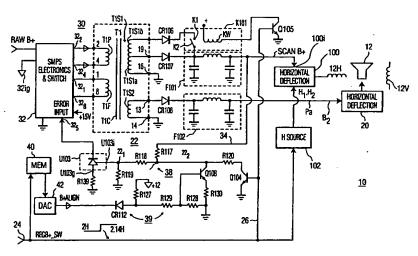
- (74) Agents: TRIPOLI, Joseph, S. et al.; c/o Thomson Licensing Inc., 2 Independence Way Suite 2, Princeton, NJ 08540 (US).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: DEFLECTION SUPPLY VOLTAGE FEEDBACK CONTROL IN CONJUNCTION WITH FREQUENCY CHANGE



(57) Abstract: A video display (10) includes a scanner (100) operable at a first frequency (H1) and a higher second frequency (H2). A switchmode power supply (SMPS) (32) drives a transformer (T1) with three secondaries (T1S1b, T1S1a and T1S2). First and second rectifiers & filters ((CR107, CR108) and (F101, F102)) are associated with the first and second secondaries. A rectifier is coupled to the third secondary (T1S1b) and by way of a switch (K2) to the first filter (F101). Feedback from the first filter (F101) controls the SMPS (32). In a first operating mode, the scanner (100) is operated at the first frequency, the switch is open, the scanner supply (SCAN+) is a first voltage from the first filter (F101), and ancillary equipment is supplied with a third voltage by the second filter (F102). In a second operating mode, the scanner (100) is operated at the second frequency, the switch (K2) is closed, the scanner supply (SCANB +) is a second voltage, higher than the first, from the first filter (F101), and ancillary equipment is supplied with the same third voltage.



WO 03/090333 A3